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(21) International Application Number: PCT/GB96/02405 (22) International Filing Date: 30 September 1996 (30.09.96) (30) Priority Data: 9519776.0 28 September 1995 (28.09.95) GB (71) Applicant (for all designated States except US): MEDICAL RESEARCH COUNCIL [GB/GB]; 20 Park Crescent, London W1N 4AL (GB). (72) Inventors; and (75) Inventors/Applicants (for US only): RUSSELL, Stephen, James [GB/GB]; 10 Courtyards, Little Shelford, Cambridge CB2 5ER (GB). FIELDING, Adele, Kay [GB/GB]; Annex Flat, The Hall, Six Mile Bottom, Cambridge CB8 0UF (GB). CASIMIR, Colin, Maurice [GB/GB]; Imperial College School of Medicine at St Mary's, Norfolk Place, London W2 1PG (GB). (74) Agents: KIDDLE, Simon, J. et al.; Mewburn Ellis, York House, 23 Kingsway, London WC2B 6HP (GB).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
(54) Title: MATERIALS AND METHODS RELATING TO THE TRANSFER OF NUCLEIC ACID INTO QUIESCENT CELLS (57) Abstract Materials and methods for transferring nucleic acid encoding a polypeptide for treating a disease or disorder into populations of quiescent cells such as haematopoietic stem cells (HSCs), using retroviral packaging cell lines and retroviral particles expressing and displaying a growth factor such as stem cell factor (SCF) on the cell surface or as a fusion with a viral envelope protein. The present invention also relates to compositions comprising the retroviral packaging cell lines and retroviral particles, and their use in methods of medical treatment, <i>in vivo</i> and <i>ex vivo</i> .		